Abstract

Disclosed is a crystalline human CR2 protein in complex with C3d, and the three dimensional structure of the crystalline complex. Also disclosed are methods of use of the structure, particularly for structure-based identification of compounds that bind to CR2 and inhibit or enhance the binding of CR2 to a natural ligand, that bind to CR2 and agonize or antagonize the receptor, that bind to CR2 and inhibit or enhance CR2 dimerization, or that use the C3-binding ability of CR2 as a drug delivery vehicle. Also disclosed are therapeutic compounds obtained by such methods and uses for such compounds.